



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/827,335	04/05/2001	David E. Ewel	854.51US01	2979

7590 02/18/2004

MERCHANT & GOULD P.C.  
P.O. Box 2903  
Minneapolis, MN 55402-0903

EXAMINER

PEZZLO, BENJAMIN A

ART UNIT	PAPER NUMBER
----------	--------------

3683

DATE MAILED: 02/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/827,335

**Applicant(s)**

EWEL, DAVID E.

**Examiner**

Benjamin A Pezzlo

**Art Unit**

3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-10,12-21 and 23-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3,12 and 19-21 is/are allowed.
- 6) ☒ Claim(s) 1,4-10,13-18 and 23-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 10, 13-18, 23, and 25-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Imoto et al. (US 4755008).

An electronically enhanced brake valve for controlling a braking output to a vehicle having at least one wheel, the brake valve comprising: (a) a primary valve assembly having an output 144 for communicating a braking output, the primary valve assembly being configured to receive a manually controlled input that varies the braking output, the primary valve assembly including: (i) a first spool valve configured to vary the braking output according to the manually controlled input; and (b) a secondary valve assembly integral with the primary valve assembly, the secondary valve assembly being configured to receive input signals from a programmable electronic controller, the secondary valve assembly including: (i) a second spool valve configured to operate with the primary valve assembly; and (ii) an actuator configured for engaging and activating the second spool valve according to the input signals received from the programmable electronic controller such that the second spool valve modulates the braking output communicated through the output 144 of the primary valve assembly.

Re claims 13-18, see Figs. 5 and 6 and the abstract.

Art Unit: 3683

Re claim 25, see col. 15 line 51.

Re claim 26, see solenoid 242 in Figure 6.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 27-36 are rejected under 35 U.S.C. 102(e) as being anticipated by Lubbers et al. (US6007160).

Lubbers et al. disclose a braking system for providing a range of braking outputs including a pedal 18, a primary valve assembly 16 including a fluid pressure chamber 46 and a spring 65 and a secondary valve assembly 37 and a second braking output and feedback force corresponding to compression of the spring and force derived from the secondary valve (see col. 5 lines 1-20).

Re claims 28-36, see Fig. 1.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 3683

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 1, 4-9, 23, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imoto et al. (US 4755008).

Imoto et al. disclose a hydraulic brake system (see Figs. 5 and 6) for supplying a braking output (230) to a vehicle having at least one wheel, the braking system including a primary valve assembly 12 configured to receive a manually controlled input 14 that varies the braking output, the primary valve assembly including a first spool valve (the spool valve is within the master cylinder 12) configured to vary the braking output according to the manually controlled input, and a secondary valve assembly 201, the secondary valve assembly being configured to receive input signals from a programmable electronic controller (ECU) the secondary valve assembly including a second spool valve 221 configured to be operated with the primary valve assembly; and an actuator (solenoid 242 and armature 245) for engaging and actuating the second spool valve according to the input signals received from the programmable electronic controller such that the second spool valve assists the braking output produced by the primary valve assembly.

Imoto et al. fail to disclose the secondary valve assembly being integral with the primary valve assembly. In *In re Larson* the court found that use of a one piece construction instead of the structure disclosed in the prior art would be merely a matter of design choice, see MPEP 2144.04.V.B. Accordingly, it would have been obvious to one of ordinary skill in the art to which the invention pertains at the time the invention was made to have provided the secondary valve assembly integrally with the primary valve assembly as merely a matter of design choice.

Re claims 4-9, see Figs. 5 and 6 and the abstract.

Re claim 23, see above rejection re claim 1.

Art Unit: 3683

Re claim 24, see above rejection re claim 1, note that a valve body for making the primary and secondary valve assemblies integral would necessarily include first and second fluid chambers defined by the primary and secondary valve assemblies, respectively.

***Allowable Subject Matter***

7. Claims 3, 12, 19, 20, 21 are allowed.

***Response to Arguments***

8. Applicant's arguments filed 28 July 2003 have been fully considered but they are not persuasive.

Re claim 10, the claim language primary valve assembly reads on the schematic representation of the Imoto device shown in Fig. 5, specifically, the assembly includes a common output.

Applicant's arguments with respect to claims 27-36 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin A Pezzlo whose telephone number is (703) 306-4617. The examiner can normally be reached on M-F 9-5.

Application/Control Number: 09/827,335

Page 6

Art Unit: 3683

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on (703) 308-3421. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9326.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

*Benjamin A Pezzlo*  
*2/10/04*

Benjamin A Pezzlo  
Examiner  
Art Unit 3683

BAP  
February 10, 2004